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CLAIMS

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

- 1 1. An optical system comprising
2 a doubly telecentric optical system including
3 an aperture at the juncture of the back focal
4 plane of said mirror and front focal plane of a
5 traditional camera objective, and
6 a camera.
- 1 2. The optical system of claim 1, wherein the
2 camera includes means for shifting a location of
3 an image sensor.
- 1 3. The optical system of claim 1, wherein the
2 doubly telecentric optical system includes a
3 curved concave mirror or mirror strip as an
4 objective element thereof.
- 1 4. The optical system of claim 3, wherein the
2 curved concave mirror or mirror strip is
3 spherical.
- 1 5. The optical system of claim 3, wherein the
2 curved concave mirror or mirror strip is
3 aspherical.
- 1 6. The optical system of claim 3, wherein said
2 curved mirror is a mirror strip.
- 1 7. The optical system of claim 1, wherein the
2 camera includes means for shifting a location of
3 an image sensor.

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1 14. A machine vision controllable system according
2 to claim 12 wherein the controllable means
3 includes an optical character recognition system.

1 15. A machine vision controllable system according
2 to claim 12, wherein the optical character
3 recognition system includes at least one conveyor
4 for transporting articles for view by the doubly
5 telecentric optical system.

1 16. A machine vision controllable system according
2 to claim 12, wherein the optical character
3 recognition system includes at least one planar
4 mirror.

1 17. A machine vision controllable system according
2 to claim 12, wherein the optical character
3 recognition system includes a focus detection
4 arrangement.

1 18. A sorting method for articles having visible
2 information on a face of each said article,
3 wherein said articles may be irregularly sized,
4 comprising the steps of:
5 moving, by automation, each article to a
6 doubly telecentric optical system, then imaging
7 the visible information on each article.

1 19. The sorting method of Claim 18, wherein said
2 visible information is a zip-code.

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